

#### **United States** CONSUMER PRODUCT SAFETY COMMISSION Washington, D.C. 20207

#### MEMORANDUM

DATE : July 21, 2004

Through: Todd A. Stevenson, Secretary

FROM: Martha Kosh

SUBJECT: Public Field Hearing Concerning Swimming Pool

Safety

ATTACHED ARE COMMENTS ON THE \_\_\_\_CH 04-6

COMMENT	DATE	SIGNED BY	AFFILIATION
CH04-6-1	5/26/04	Gerald Dworkin	Lifesaving Resources Inc P.O. Box 905 Harrisville, NH 03450
CH04-6-1a	6/22/04	Gerald Dworkin	Address same as above
CH04-6-2	5/26/04	Shelly Coyne	Dcoyne@aol.com
CH04-6-3	6/04/04	John Kupsch Technical Director	Good Housekeeping 250 West 55th St. New York, NY 10019
CH04-6-4	6/04/04	David Cheng	Keiki Injury Prevention Coalition Safe Kids Hawaii
CH04-6-5	6/07/04	S. C. Granger	SusanCG@Felters.com
CH04-6-6	6/07/04	Consumer	SWIMKIDS USA, INC. 2725 W Guadalupe Rd. Mesa, AZ 85202
CH04-6-7	6/14/04	Paul O'Bryne President	Florida Environmental Health Association, Inc. 12406 Kelly Ln. Thonotosassa, FL 33592
CH04-6-8	6/17/04	Theresa Seal	Sealswimts@aol.com

# Public Field Hearing Concerning Swimming Pool Safety

CH04-6-9	6/21/04	Rich Bauer Director of Community Programs	United Phoenix Fire Fighters Association, Inc. 61 E. Columbus Ave. Phoenix, AZ 85012
CH04-6-10	6/22/04	Paul Dawson	dawson@kcnet.com
CH04-6-11	6/23/04	Jim Rowles	1821 Smith St. Las Vegas, NV 89108
CH04-6-12	6/24/04	G. Anderson	waterproofkids.com
CH04-6-13	7/07/04	Kathy Ward	3954 Buena Vista Ave. Jacksonville, FL 32210
CH04-6-14	7/07/04	Diane Holm Drowning Prevention Coordinator	Lee County Health Dept. 3290 Michigan Ave. Fort Myers, FL 33916
CH04-6-15	7/07/04	Diane Sevey	dianesevey@hotmail.com
CH04-6-16	7/07/04	A Mittelstaedt Exec Director	Recreation Safety Institute P.O. Box 392 Ronkonkoma, NY 11779
CH04-6-17	7/21/04	Cathy Flynt	cflynt@cox.net
CH04-6-18	7/22/04	Julie Spelman	Innovative Aquatics, Inc. 1923 SE 10 <sup>th</sup> Place Cape Coral, FL 33990

#### Stevenson, Todd A.

Drown or wall

From:

Cohn, Murray S.

Sent:

Wednesday, May 26, 2004 3:51 PM

To:

Stevenson, Todd A.

Subject:

RE: Feedback from Online Form

Todd, here's a comment from a member of the public. Thanks, Murray

Name = Gerald M. Dworkin Organization/Affiliation = Lifesaving Resources Inc. Address = admin@lifesaving.com

Additions to site: Your recent publication, CPSC Warns about Pool Hazards, Reports 250 Deaths of Young Children Annually: Federal Agency Launches Drowning Prevention Initiative, Holding Public Hearings is great. However, this only pertains to residential swimming pools. The CPSC and the swimming pool and spa industry needs to address Class C Public Swimming Pools (apartment complexes, hotels, motels, etc.). There has been a consistent failure to address this market and there is a large number of submersion incidents, especially of young children, within this type of setting.

Suggestions to improve: See above. In addition, we have submitted suggestions to CPSC and the NSPI in the past regarding this matter - all of which have not been addressed.

Additional comments: Lifesaving Resources Inc. <a href="http://www.lifesaving.com">http://www.lifesaving.com</a>
P.O. Box 905
Harrisville, NH 03450
603/827-4139

#### Stevenson, Todd A.

From:

Information Center

Sent:

Tuesday, June 22, 2004 11:20 AM

To: Subject: 'Gerald M. Dworkin' RE: Drowning

Hello,

We have forwarded your comments to the appropriate office and if additional information is needed, we will contact you.

mlj

----Original Message----

From: Gerald M. Dworkin [mailto:admin@lifesaving.com]

Sent: Tuesday, June 22, 2004 7:49 AM

To: Information Center

Subject: Drowning

I appreciate the work the CPSC is doing on drowning prevention. HOWEVER, this effort seems to only deal with residential backyard swimming pools and your LAYERS OF PROTECTION is simply a repeat of the information advocated by the NSPI, because safer backyard swimming pools produce more sales for that industry.

I, personally, consult as an Expert Witness in drowning and aquatic injury litigation and have a large number of cases involving submersion incidents at Class C Public Swimming Pools (i.e. apartment and townhouse complexes and hotels and motels). Your LAYERS OF PROTECTION and your drowning prevention efforts don't touch on these incidents.

I have offered my assistance to the CPSC on a number of occasions, but have never received a reply to my letters. I strongly encourage the CPSC and the NSPI to strongly advocate drowning prevention strategies and to implement educational programs for those people who own, operate and manage Class C swimming pools.

Gerald M. Dworkin, Consultant Aquatics Safety & Water Rescue LIFESAVING RESOURCES INC. http://www.lifesaving.com P.O. Box 905 Harrisville, NH 03450 603/827-4139

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#### Stevenson, Todd A.

From:

Information Center

Sent:

Wednesday, May 26, 2004 1:41 PM

To:

'DCoyne@aol.com'

Subject: Drowning Prevention

Hello,

We have forwarded your comments and concerns to the appropriate agency personnel. If additional information is needed, a representative will contact you directly.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at www.cpsc.gov. Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

tm

-----Original Message-----

From: DCoyne@aol.com [mailto:DCoyne@aol.com]

Sent: Tuesday, May 25, 2004 5:28 PM

To: Information Center

Subject: Drowning Prevention

Thank-you so much for the attention you're giving to the horrible deaths of children

through drowning!

I live in Florida where such occurrances are all to frequent. I also own a couple of swimming pool supply stores, so I hear more horror stories than just what is reported on the news. Aside from the tragedy of children, you would be amazed at how many family pets are lost to drowning.

If I may make one suggestion, please, it would be to include in your prevention papers something about keeping the pool blue and clear. Most all drownings of young children happen in green, pond-like pools. I believe that instinctually, the first place a parent looks for a missing child is the swimming pool. However, if that pool is green or cloudy, you can easily overlook a child on the bottom because you can't see them.

This has been my personal campaign for many years. I have been accused by customers of simply trying to sell them merchandise, when in truth, there are legitimat safety reasons to keeping your pool blue and clear.

Thanks for taking the time to listen, **Shelly Coyne** Part of the Pinch A Penny family www.pinchapenny.com

> My goal in life is to be as good of a person as my dog already thinks I am

# **Good Housekeeping**



250 WEST 55TH STREET, NEW YORK, NY 10019 \* 212-649-2200 \* FAX 212-649-2340

June 4, 2004

Hal Stratton Chairman U.S. Consumer Product Safety Commission 4330 East West Highway, Suite 724 Bethesda, MD 20814

Dear Mr. Stratton,

Thank you for the invitation to attend the public hearing on pool drownings of children under five years old to be held on June 21, 2004 in Tampa, Florida. We do not plan to attend, but please be assured that the *Good Housekeeping Institute*, one of the nation's foremost product evaluation laboratories, is concerned about the high levels of injury and death that are occurring in swimming pools across the country.

Consequentially, *Good Housekeeping* will be featuring a story in our August issue about pool safety, specifically, which pool alarms should be bought and which ones should be avoided. In recent Good Housekeeping Institute tests, we evaluated in-pool alarms for both alarm loudness and motion sensing ability. Of the three brands we tested, only Poolguard's Model PGRM-2 sounded off within 20 seconds each time a child simulator was dropped into a normal-size backyard pool. Another model, Smart Pool's Pool Eye, took longer than 20 seconds to ring and the Pool SOS alarm that we bought was defective, so we cannot recommend either model because they could be unsafe.

We believe that the ASTM Standard 2208-02 improves the overall safety of backyard pools. However, this is only a voluntary standard. In addition to pool alarms, there are other areas covered by voluntary standards, such as, gates, doors, etc. where many different products exist on the market, virtually all with varying levels of performance.

We recommend that the CPSC establish a mandatory standard for pool alarms that will hold manufacturers to the same level of performance. This would assist parents in being able to stop playing roulette with their children's safety.

Cupil

Thank you for your consideration.

Best regards,

John Kupsch, P.E. Technical Director

Good Housekeeping Institute

cc: E. Levine, R. Eisenberg, D. Weaver



Swin Comment



#### SAFE KIDS Hawaii

June 4, 2004

TO:

Deborah Tinsworth

**CPSC Coordinator** 

FROM:

Keiki Injury Prevention Coalition/SAFE KIDS Hawai'I (KIPC)

SUBJECT:

CPSC Drowning Prevention Campaign: Strategies to Prevent Drowning Deaths

Drowning is the leading cause of injury death for children birth to 5 years of age. Most of these drowning occur in pools and bathtubs.

To encourage feedback from Coalition members on this important injury prevention issue for Hawai'i's keiki (children), KIPC held a special forum to brainstorm strategies as part of their monthly meeting on June 4, from 12 noon to 1:30 pm. Following are the recommended strategies and comments for preventing pool-related drowning:

Strategies

- 1. Enlist the help from the pool industry (maintenance companies, pool installers/builders, supply companies, etc.) along with realtor associations, to educate pool owners, and to report any serious "danger areas" in and around pools. Create some sort of "safety inspection sticker" for pools similar to car safety inspection stickers.
- 2. Create some sort of insurance break or tax credit for pool owners who are in compliance with safety standards (similar to a tax break received for solar power panels installed in people's homes).
- 3. Assess a small tax for swimming pools. Pool owners would pay the tax or present proof positive that they have 4-sided fencing. Put the funding from the tax into prevention efforts, i.e., learn to swim. Justification for the tax is that drowning prevention is a community injury prevention effort that requires EMS, Fire etc. to respond whenever there are drowning incidents.

Note: Even if law didn't fly, the process of introducing the bill and holding hearings would encourage discussion about drowning prevention, and the serious nature of alerting parents and caregivers to the safety hazards that could lead to drowning.

- 4. Need stronger warning messages, especially for parents (to address the fallibility of human behavior—"a moment of inattention can last a lifetime"). Example: standard beach signs are not always effective perhaps a "skull and crossbones" approach to emphasize the serious nature of the problem.
- 5. Promote the U.S. version of Australia's successful 5 Alive Program. This "Safer Three" program is being launched this summer. Three legs of triangle of water safety are:
  - a. Preventive Barriers
  - b. CPR & First Aid
  - c. Teach Children How to Swim

Note: No evidence that CPR effective in resuscitating young drowning victims.

6. Promote the water watcher tags for parents to wear when a swimming event is being held at their pool or beach. The wearer of the tag is responsible for watching the pool until relieved by another water watcher who dons the tag. The responsibilities of the water watcher are printed on the tag. (NSKC promoted).

#### Discussion:

• Supported CPSC's multiple layers of protection. These are strategies that "buy" time but cannot replace adult supervision. One type of protection alone is not sufficient. In addition to four-sided pool fencing and self-closing self-latching gate, several examples were given (some with limitations), wrist alarm (water sensitive), pool covers (though these have their problems and are not a total solution) and floating pool alarm (sometimes gets set off by falling debris)

Note; One of the recommendations for Hawaii's State Injury Plan is 4-sided fencing (building code in Hawaii does not currently require 4<sup>th</sup> side to be anything other than the house or adjoining building).

- Adult supervision vitally important (don't make older siblings responsible for young children). Educate the public re. age and developmentally appropriate expectations of children.
- Make sure any toys in or around pool are cleaned up and locked up. They are an
  incentive for toddlers to try to get into the pool area.

- Public awareness of the misconception that children splash and scream when they fall into the water. Drowning is usually a silent killer. Additionally, when children fall into a pool, they usually sink to the bottom versus floating on the water's surface.
- Pediatricians are already participating in giving parents many prevention
  messages, including water safety when family comes in for visits. It's part of their
  list of "anticipatory guidance" tips. Problem as the child gets older, the visits are
  less frequent.
- One of participants recapped her own near drowning experience, and recommended that when teaching keiki to swim, make sure they get the message, "Don't Panic!" Although panicking is more a reflex, teaching children how to respond in the event of a drowning, could be included as part of water safety instruction.
- Hawaii's Child Death Review will provide additional information on drowning
  circumstances that can be translated to more effective prevention efforts. Some of
  contextual questions about drowning include: "Was there pool fencing, and was it
  4-sided? Were there other protective measures in place such as self-latching gates,
  etc.?" "Did the child know how to swim; had he or she received swimming
  lessons?"

#### Stevenson, Todd A.

From: Ch

Cheng, David G.

Sent:

Wednesday, June 09, 2004 5:10 AM

To:

Tinsworth, Deborah K.

Cc:

Nava, Frank J.; Stevenson, Todd A.; Elder, Jacqueline

Subject: Summary of strategies for pool public hearings

Debbie,

Please see attachment for swimming pool safety strategies from the local Safe Kids coalition.

Thanks,

David Cheng 808-733-8710

Attached is a summary of the recommendations and discussion on strategies for pool drowning prevention for the CPSC public hearings from last Friday's KIPC meeting. Thanks to all of you were able to provide input.

Please review and email any comments or changes to David Cheng, CPSC representative for Hawaii at DCheng@cpsc.gov, by no later than Wednesday morning, June 9th. David got approval to extend the original deadline of June 7th.

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## For details on the public hearings, see:

http://www.cpsc.gov/BUSINFO/frnotices/fr04/poolmtg.pdf

Therese M. Argoud Hawaii State Department of Health Injury Prevention

Tel: (808) 586-5941 Fax: (808) 586-5945

E-mail: tmargoud@mail.health.state.hi.us

Please add this water safety tip to your website and literature

Stevenson

Page 1 of 1

From:

Information Center

Sent:

Monday, June 07, 2004 1:21 PM

To:

'SusanCG@Felters.com'

Subject: Please add this water safety tip to your website and literature

Hello,

Thank you for contacting the U.S. Consumer Product Safety Commission (CPSC). have forwarded your valuable comments to the appropriate agency personnel.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at www.cpsc.gov. Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

myg

----Original Message----

From: Crow-Granger, Susan [mailto:SusanCG@Felters.com]

Sent: Monday, June 07, 2004 12:33 PM

To: Information Center

Subject: Please add this water safety tip to your website and literature

This safety tip is submitted in the name of Claire Hennigan, a five year old near drowning victim who was thankfully resuscitated and is now well and normal. Please add this tip to your website for parents of children under 6. Buy only very brightly colored swimsuits for your young child, so they are easy to see in the water. Claire was wearing a light colored suit that blended in with our pool liner, and three different adults could not initially see her lying on the bottom of the pool. Of course, wearing personal flotation device is the most important safety tip, but this is meant to be supplemental info. A bright suit is something we never thought of until we experienced first-hand the difficulty of seeing someone through 10 feet of water in a pale swimsuit. Please have a safe summer.

Derived many

### Statement of the Problem

Over the last twenty years drowning has remained one of the major causes of accidental death of children in the United States. And the number 1 cause of accidental death in children under 5 in Arizona. The tragedy of pool drownings, unlike car accidents, is that they are almost always preventable. The solution to this huge problem is adequate fencing, parent education and the effective training of young children in aquatic survival techniques. This essay will address the issues of effective aquatic survival training for children under the age of 5, including: (1) the techniques and credentials of those offering survival training, (2) the best ages to introduce water safety lessons, (3) realistic performance goals needed in aquatic lessons, (4) non-traumatizing methods desired in training young children aquatic skills, (5) appropriate sequencing required for skill mastery in survival lessons, and (6) long term retention and overlearning that needs to be incorporated into aquatic survival skills training.

The Internet is full of information about swimming lessons for small children that claim to "set the standard" in water survival instruction. There is a tremendous range of expertise and abilities among the different approaches and their instructors. There are no real national standards in this industry. Although, there are organizations that have very rigid standards that train and certify instructors, continue with the education of their instructors and serve to advance the industry of aquatic survival training.

The Swimkids' USA method has been nationally recognized for its expertise in teaching, testing and establishing norms for aquatic survival skills for young children. Developed in 1971, our method is the result of 7 years of Arizona State University research and 33 years of empirical data. Swimkids founder, Lana Whitehead has a B.A. Degree in Exercise Physiology and Masters Degree in Special Education. She has authored several aquatic books, swimming videos and lectured nationally for professional educational forums. Lana and her staff continue they're training yearly at the United States Olympic Training Center and USA Swimming, at United States Swim School Association workshops, in World Aquatic Baby Congress Seminars, and at American Red Cross re-certification classes in Lifesaving, CPR and First Aid for the Professional

Rescuer. The Swimkids' method has trained over 50,000 children in one of the most effective aquatic survival techniques in the Nation.

The issue of when to introduce youngsters to water has been debated for years. The Council for National Cooperation in Aquatics (CNCA), comprised of 36 national member organizations (e.g. Red Cross, YMCA, YWCA, Park and Recreation Associations, etc.) and the <u>American Academy of Pediatrics</u> (AAP) have issued statements that recommend "minimum age for organized swimming instruction be set at age 3" (AAP, 1982; CNCA, 1973).

Developmentalists suggest that we should view development as an interaction between genetic factors and environmental experience and not as a maturation hypothesis gathered from generalizations regarding children's motoric & cognitive stages. Stephen Langendorfer (1986) has stated that use of an automatic age limit or range is often not advisable from a developmental point of view, and that "motoric repertoire of the 1 to 3 year old holds many similarities between the development of upright locomotion and independent swimming" (p. 42). Langendorfer suggests that an age range of between "12 and 18 months, or the onset of independent walking, represents a starting point for swimming instruction consistent with motor development literature" (p. 42). Research to date, specific to the appropriate age to introduce water safety skills to young children was conducted during the 1970's at the Infant Swimming Research in Florida (Barnett, 1972) and the Swimming Institute of Munich Germany (Gebhardt & Bauermeister, 1970). Barnett, a physical educator, who has conducted 26 aquatic research studies at the Infant Swimming Research in Florida, recommends 12 months to begin teaching a young child to roll over and float (Barnett, 1972). Results from a longitudinal study conducted by the Swimming Institute of Munich Germany suggest 22 months as the recommended starting point for appropriate mental maturity and physical agility to execute swimming survival skills. The Swimming Institute of Munich Germany conducted this four-year research program with 669 children (237 up to 12 months, 225 from 13 months to 3 years, 207 from 3 years to 5 years) in an effort to collect extensive data on when and how to teach swimming to very young children.

Performance goals used in aquatic survival programs should promote independent mobility, safety and survival skills (breath holding, then blowing bubbles, floating, rotating from front to back, kicking to the steps and side, and climbing out), and water adjustment. At Swimkids USA, Inc., we introduce 8 to 18 month olds to the water in parent/tot classes that teach basic aquatic survival skills while encouraging bonding between parent and child. Children who begin swimming at 18 to 22 months are taught to swim to the side or step, jump into the water, rotate onto their backs where they can float alone and cry for help. Once a child has mastered the beginning survival subtasks, he/she can progress to an advanced sequence of, swimming the length of the pool while rotating onto their backs to breathe and rest, alone. This entire process can take anywhere from 10 to 40 lessons depending on the young child's age and familiarity with the aquatic environment.

Traumatizing methods used in instruction have become a source of great controversy and concern to the American Academy of Pediatrics (1982), and the California Medical Association (1984). Both institutes have issued reports stating that any method, which traumatizes children, is highly inadvisable. Threat, compulsion and punishment can be traumatizing. Acceptable methods utilize purposeful play in a nurturing environment. Well sequenced, activities geared for instruction, enjoyment and developmental levels of children will create an atmosphere of learning (CNCA, 1973). The benefit of activities and games in a nurturing, water safety environment is viewed as highly beneficial and rewarding. At Swimkids, criterion skills are assigned a key word and activity that represent and cue specific responses. For example, the word "pop" could signal a child to dive to bottom of pool, pick up a colored ring, push off the bottom, climb to the surface, rotate to the back and float in "airplane". Airplane is the key word for back floatation. The child floats in a supine position, legs straight, with his arms directly out to the side of his body like airplane wings. The child is then trained to fall in to the water fully clothed, rotate on to his back to rest and breathe and rotate to a prone position to swim to the safety of the wall or stairs. When we ask our students what they would do if they fell in the pool, they yell, "Airplane", while flinging their arms into the back float position. The total aquatic experience can become one of enjoyment, achievement and success.

In teaching very young children, <u>structure</u> and <u>order</u> are essential. The teacher must assess the student's current level of performance, define precisely the skill to be

learned, and skills must be ordered in an appropriate sequence (Howell & Morehead, 1987). Researchers, McKenzie and Jaks (1984) believe that very young children typically progress in very small steps, so it is essential to break a gross motor task (such as aquatic survival skills) into small easy-to-teach subtasks with task analysis. Each subtask or skill is then stated in its appropriate order of occurrence and sets the occasion for the occurrence of the next behavior (sequencing). Swimkids has engaged in comprehensive research projects at Arizona State University to develop empirically based techniques that are well sequenced and task analyzed. In our aquatic survival program, a student must master one skill before moving up the sequence to the next skill. This philosophy fosters confidence and builds self-esteem while the child is learning self-discipline, focus and persistence.

Children's retention of swim skills must also be addressed. The California Medical Association (1984) in it's official statement on risks of toddler swim programs reports, "parents cannot expect their toddlers to learn and remember the rules of true water safety or know how to act in an emergency" (p.1). Basically, skeptics agree that some two year olds can swim across the pool, but one cannot expect them to behave appropriately in water emergencies (Micheli, 1985). The California Medical Association, however, has failed to recognize some very basic learning principles, that if applied correctly could further skill retention in a small child and train him/her to respond appropriately when falling into a vacated pool. Dr. Howell (1987) describes these basic learning principles or proficiency levels as: (1) accuracy (proportion of items or skills done correctly), (2) mastery (fluency or rate with which items or skills are done correctly), and (3) automaticity (ability to maintain a correct and fluid display of knowledge or skills under varying conditions).

When students begin to learn skills they must allocate so much attention to tasks that even slight distractions will affect the <u>accuracy</u> and the rate at which the skills are performed. At Swimkids, once the skill has reached the <u>accuracy level</u> the rate at which the task is performed is increased until the task is <u>mastered</u>. This practice beyond the criterion of one perfect trail while increasing the rate has an enormous effect on subsequent retention. Our Swimkids' students must practice airplane (back float sequence) over and over, increasing the rate at which the skill is executed correctly until

it is mastered. Once the child can perform "airplane" alone, accurately and quickly, we add varying conditions (clothes, different pools, no instructor etc.) to see if he/she is automatic (can do it without thinking about it). For example, when a child who is trained just to accuracy and mastery in the "Airplane", jumps into the pool fully clothed for the first time, the subject usually forgets a step or two of the floating sequence because he/she is so pre-occupied with the shock of wearing clothes (a varying condition). Therefore, children must be taught beyond mastery to automaticity (over-learning) in order to perform accurately and quickly under real-world conditions, such as a child falling into a pool with no adult supervision. The student continues to work on the accuracy and mastery of "airplane" until he can demonstrate the skill alone under realworld conditions for at least 4 lessons. Students who can work well under varying or real-world situations are assumed to have better knowledge and skills than students who can only work under one condition. When he/she has passed the automatic level in "airplane", he/she progresses to our advanced sequence of swimming the length of the pool rotating to the back to breathe and rest. Water survival methods must teach students to the automaticity level in order for them to retain their skills and transfer their learning outside of swim class. Hall (1982), Krueger (1929), Postman (1962), Fitts & Posner (1967) and Howell & Morehead (1987) substantiate this theory with research studies that demonstrated that over learning (automaticity) significantly influences retention from 50% to 95%-100%.

References noted in this paper were taken from my Master's Thesis at Arizona State University, May 1991. If you would like a copy of the bibliography or have any questions regarding the research, please contact me (Lana Whitehead) at Swimkids USA, Inc., 2725 W. Guadalupe Rd, Mesa, Arizona, 85202-7236, ph (480) 820-9109, fax (480) 820-3590.

# FLORIDA ENVIRONMENTAL HEALTH ASSOCIATION, INC.

An affiliate of the National Environmental Health Association



A non-profit association serving the environmental health profession in the State of Florida

June 14, 2004

Dear Meeting Coordinators,

Your meeting topic is of interest to our group- the Florida Environmental Health Association. We have also noted the importance of this issue of pool safety and childhood drownings. To assist with this problem, we professionally produced a short- thirty (30) second Public Service Announcement (PSA) for TV on this topic and have made it available to many of the major television stations around the state of Florida. Unfortunately, without anyone pushing the issue as a hot news item, the tapes are likely sitting on a shelf at the stations and not being aired as they should, so we might make a difference and save some lives.

With that said, I would like to offer our services to present the PSA at your meeting in Tampa June 21st, and/ or send you a copy to view yourself to see if it may be useful in this process. It is available both in VHS and Beta format (for TV). So, if you would like to show it at the meeting you will need a VCR and TV. Please let me know how we might assist you with your efforts. You may contact me via email paul o'byrne@doh.state.fl.us or phone (863) 499-2550.

Thank you,

Paul A. O'Byrne, R.S., M.P.H.

President

Florida Environmental Health Assoc.

MEMB Application Misson Maken Waltebasiana Pl. MANA

Stevenson Todd A.

Phonon many

From:

Tinsworth, Deborah K.

Sent:

Thursday, June 17, 2004 4:13 PM

To:

Hammond, Rocky

Cc:

Stevenson, Todd A.; Elder, Jacqueline

Subject:

FW: Drowning Prevention

Here is another set of comments. Theresa Seal will try to attend, but will not be making a formal presentation...

Debbie, I forgot to sign my e-mail so if I think of anything else I will forward. Thanks again, Therese C. Seal, Seal Swim Schools/TampaBay

I also think that we should have one main agency instead of so many different areas of expertise with the same motives.

----Original Message----

From: Sealswimts@aol.com [mailto:Sealswimts@aol.com]

Sent: Thursday, June 17, 2004 3:59 PM

To: Tinsworth, Deborah K. Subject: Drowning Prevention

Debbie, it was good talking with you this afternoon and I have listed a few of my concerns:

The American Academy of Pediatrics states that children should not take swimming lessons until they are 4 years of age, however, high risk of drownings are our two year old males. It is also interesting that 99 percent of the peditricians in our community tell their clients to get their little ones into swim lessons and hand out our literature.

The ARC has a great program for children ages 3 to 7 called Whales Tales, but no one promotes it including our local ARC. We have reached over 10,000 children a year in the Tampa Bay area with the Whales Tales program without any aknowledgement from the ARC, and we have done this at our own expense. Its a great program, reaches the children at their own level, but, quite frankly, it is too expensive for us to continue.

Life jackets (children's included) should be in the bright neon colors or red, however, they are in the stores in pale pinks, blues with characters on them, etc. If I needed the Coast Guard to spot me in the water in an emergency, I certainly wouldn't want to have one of the pale colored ones on.

Florida is the only state in the United States that requires swimming instructors to have a national certification. When I started teaching, I could have been a plumber looking for extra work. It is important and I believe a great policy that the rest of the states should follow.

June 21, 2004

Mr. Hal Stratton U.S. Consumer Product Safety Commission Washington, DC 20207

Dear Mr. Hal Stratton;

On May 4<sup>th</sup> 2004, we received notification of hearings to be conducted in the City of Phoenix with regard to the issue of child drowning, and drowning prevention. The United Phoenix Firefighters Association has been involved in the prevention of child incidents since 1988 when we started our Save-R-Kids Campaign. This Campaign is heavily concentrated on child safety issues, car seats, drowning prevention etc.

Starting Memorial Day of 2002 The UPFFA has partnered with several Community Businesses including Leslies Pool Supplies and SRP, and together we have installed over 100 pool fences, to qualifying families, to provide barriers from the house to the pool in an aggressive attempt to bring the number of childhood drowning down.

Since 1988 The UPFFA has been conducting and certifying people in CPR, First Aid, and now a new curriculum to certify young adolescence as Certified Baby Sitters. All of these are designed to develop "Safety Minded Behavior Habits".

The UPFFA have done numerous different attempts at bringing childhood drowning down, including PSA's, Safety Fairs and "Catchy Phrases" to bring awareness to our community. Unfortunately sometimes these Catch Phrases become like elevator music, nothing more then background noise, and the bottom line is, they don't work. The one thing proven to work is a barrier between the house and the pool. Nothing can beat, eye on eye contact with your child, however this is not always possible in today's busy life. The next best thing is a pool fence, to code, with a self-closing, self-latching gate, between the house and the pool.

To the best of my knowledge, The UPFFA is the only Firefighter organization in the country, taking this aggressive action in the prevention of child drowning.

The Letter we received from Commissioner Stratton also asked what could CPSC do to prevent and reduce childhood drowning. Here are some of our recommendations.

- 1) Assist with lobbying for Sate Wide Laws requiring pool fences to homes with children 6 years and under residing there, or any caregiver of a child 6 years of age or under. This is no different then car seat laws that are already in effect, and enforced in this state.
- 2) Provide funding and resources for educational programs to help develop this safety conscious behavior in young adults.
- 3) Provide funding for barriers, pool fences, in homes for families that have a financial hardship.

In closing we feel the program that I have outlined has aggressively provided punitive steps to reduce and prevent drowning in our cities. Enclosed is and article that appeared in The Arizona Republic on Friday June 18<sup>th</sup> 2004 about our efforts.

Please feel free to contact me for any other information, and please visit our web site at <a href="https://www.SaveRKids.org">www.SaveRKids.org</a>

Rich Bauer

Thank You

Director of Community Programs

United Phoenix Firefighters Association

602-277-1500

rbauer@phxfirefighters.org

. cc: Ms. Rocky Hammond Deborah Tinsworth



of Homestead Vinyl Products installs the pool fence at Dora Molina's home in Avondale on Thursday. Molina voirs done the Adopt-a-Fence program to safeguard her two grandchildren's lives.

# Pool-fence program Sestows gift of security

By Holly Johnson

were over.

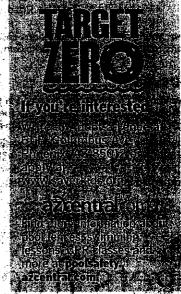
But then I judge gave her lence."

Custody of her two voung. That's where the United grandchildren, and the 50 Phoenix Firefighters Associated of Avondale woman had thon's Adopt a Pence program a new problem.

gonna do?'-I had so many other things to take care of. I didnit know how I could get a

She had a pool that needed a vides free fencing and instalfence. But she had no way to lation to families who own a pay for it. home with a pool, have chilpay for it. home with a pool, have "I was scared." Molina said. dren younger than 6 an "I just thought, 'What am I press financial need. dren younger than 6 and ex-

Adopt-a-Fence, now in its third year, began with Phoenix fife Capt Rich Bauer, the program, manager, trudging door-to-door, soliciting donations. At first, the going was



Page 1 of 1

#### Stevenson, Todd A.

From: Information Center

Sent: Tuesday, June 22, 2004 2:30 PM

To: 'dawson@kcnet.com'

Subject: kids downing

Hello,

We have forwarded your comments to the appropriate agency personnel. If additional information is needed, a representative will contact you directly.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at <a href="https://www.cpsc.gov">www.cpsc.gov</a>. Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

tm

----Original Message-----

From: mayfield fancy [mailto:dawson@kcnet.com]

Sent: Tuesday, June 22, 2004 2:40 PM

**To:** Information Center **Subject:** kids downing

here's an idea. teach kids how to swim. I learned at three. If you have a pool in your backyard there is no excuse for not teaching your kids how to swim. paul dawson kansas city, missouri

Windson Page 1 of 1

#### Stevensøn, Todd A.

From:

Information Center

Sent:

Wednesday, June 23, 2004 4:08 PM

To:

'jandjrowles@juno.com'

Subject: Children drowning in swimming pools

Hello,

Thank you for contacting the U.S. Consumer Product Safety Commission (CPSC). Your comments have been forwarded to the appropriate agency personnel. If additional information is needed, a representative will contact you directly.

Please be advised that you may obtain CPSC publications, recalls and general safety related information via our web site at <a href="https://www.cpsc.gov">www.cpsc.gov</a>

Click on the "Search" icon and type in your topic. You may also file an incident report via the web site mentioned above. If you have additional inquiries, you may call our toll-free hotline at 1-800-638-2772, Monday - Friday, 8:30am to 5:00pm, Eastern Standard Time. Press 1 to begin and then press 3 to speak with a representative.

tm

----Original Message----

From: james a rowles [maxilto:jandjrowles@juno.com]

Sent: Tuesday, June 22, 2004 11:51 PM

To: Information Center

Subject: Re: Children drowning in swimming pools

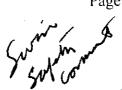
Have the damn parents train the kids to swim, or get swimming training.

Next, those motorized scooters available from many outlets will be blamed for children injuries/deaths when the fact is the parents did nothing in the way of training.

MAKE PARENTS RESPONSIBLE!

PERIOD

Thank you, Jim Rowles 1821 Smith St Las Vegas, NV 89108



#### Stevenson, Todd A.

From:

Tinsworth, Deborah K.

Sent:

Thursday, June 24, 2004 5:51 PM

To:

Hammond, Rocky; Stevenson, Todd A.

Subject:

FW: water safety

Follow Up Flag: Follow up Flag Status:

Flagged

Could you please add this to the pile of public comments? Merci beaucoup! Deb

----Original Message----From: Ross, Mark K.

Sent: Thursday, June 24, 2004 8:50 AM

To: Tinsworth, Deborah K. Subject: FW: water safety

Here's another note commenting on Pool Safety.

Mark

----Original Message----

From: Gaylene Anderson [mailto:gaylenea@hawaii.edu]

Sent: Wednesday, June 23, 2004 10:32 PM

To: Ross, Mark K. Subject: water safety

Hi Mark,

I wanted to write the CPSC and give a comment on this subject. Last month I was invited to attend the local Hawaii chapter meeting to talk about water safety and what could be done. As you know, Hawaii is a state with enormous amounts of pools, beaches, and water related activities. The State Health Department and City and County Lifeguards do a great job with public service announcements but it is not enough. Most of the information that is distributed talks about watching your children around water or putting up barriers (gates, alarms, etc.). This is important but I believe parents need to also hear that they MUST teach their children how to swim from the earliest age possible.

I have been a swim instructor/swim coach for 18 years and have worked all over the country. Before moving to Hawaii, I was living in Alabama and working on a Masters in Health Education. Living in the South, I learned that there are a lot of people that simply do not have access to swimming lessons or water safety information. I decided to make a video that would teach parents the basics and could be distributed nation wide in places like Wal-Mart/K-Mart and sold next to the water toys...not hidden in the video section. The video is called Waterproof kids and it is currently available online at www.swiminfo.com and targeted to be in Wal-Mart stores Aug. 1, 2004. I share this with you in hopes that the CPSC will also recognize the need for more educational tools available to the public. If you would like more information on the DVD or the Campaign it is attached to, please see the below websites. Thank you for your time.

Cheers,

Gaylene Anderson Waterproof Kids (808) 221-5483

www.waterproofkids.com www.safer3.org

www.waterpals.com

Showing the state of the state

US consumer products commission Office of the Secretary 4330 E.W. Highway Bethesda, MD 20814

To all concerned with swimming pool safety:

My name is Kathy Ward and my grandchild McKenzie Merriam drowned in her backyard swimming pool at only 18 months old. There were no barriers between herself and her pool . Since this has happened, I view swimming pools very differently. They are not beautiful to me, all I see is a death trap for a young child.

We live in Florida where there are many backyard pools, and more built each day. Parents do not think this can happen to their child because they watch their child. This is what my daughter Debbie said to me every time I talked about how worried I was about the swimming pool.

My daughter Debbie tried to kill herself after McKenzie drowned, because she said It was all her fault. She only let her out of her sight for a short while. Parents do not realize it only takes a few minutes for a toddler to get out of sight and into a pool..

I worked on the Preston Delbern, McKenzie Merriam residential swimming pool safety act for 3 years. When it went into law in October 2000, I felt so good that we were going to save many children from this horrible death.

I was so wrong in my belief that this is all we had to do. We need so much more to save these children.

First of all parents need to change their thoughts about that pool. They need to always think of it as a killer of children, just like they would think of a loaded gun with a child.

We need stricter laws all over the US about pool safety. We need billboards on every highway about swimming pool safety. We need pool companies to have signs up about swimming pool safety. Swimming pools are more likely to kill your child under the age of 5 than a car accident, cancer or any other cause of death you can think of.

Many of these children do not die, they suffer brain damage, and have a very short life. Most of these swimming pool drowning or near drowning are preventable.

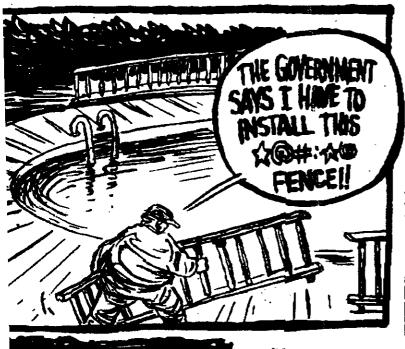
I hope we can come up with a plan to stop these little children from drowning. I will do anything I can to help. I do not want any family to have to experience what mine has with our loss of McKenzie.

I have enclosed a picture of McKenzie as well as article cut out of the paper.

Regards,

Kathy Ward 3954 Buena Vista Ave. Jacksonville, FL 32210













beapener of

#### Swimming Pool Hearing Diane Holm

#### **Drowning Prevention Coordinator**

Lee County Health Department 3290 Michigan Ave.

Fort Myers, FL 33916

Phone (239) 332-9590 FAX (239) 332 9605 E-mail Diane Holm@doh.state.fl.us

What has worked to prevent swimming pool drownings of young children - and why?

- 1. Out of reach door locks (dead bolts, chains), properly installed, regularly used can keep children indoors while parents/care givers are not 100 percent focused (using the restroom, cooking, cleaning, attending to other children) on watching children.
- 2. 4-sided isolation fencing, with self-latching, self locking gates, properly installed keeps toddlers out of pools when they go outdoors.
- 3. Discipline and knowledge keep children out of the water by helping them gain an understanding that water is not safe, just as crossing the street without an adult is unsafe.
- 4. Swimming and water safety education and skills in children can enable them to keep their heads above water when they get into a pool, find a safe hold on the side, and exit safely without assistance at a young age. It can also keep them out of the water when performing a rescue of another child.
- 5. Swimming and water safety education of parents/care givers to prevent access unless constant adult supervision is present keeps children safe. Exposure to techniques of clearing a blocked airway and CPR can help prevent drowning death.
- 6. Legislation requiring barrier codes for all new and re-sale homes, with appropriate inspections to gain a Certificate of Occupancy or bill of sale.

#### What's not worked

- 1. Expecting parents/care givers to keep constant adult supervision 24-hours a day;7-days a week. Parents need breaks, parenting styles are inconsistent, verbalization skills vary, too many assumptions are made.
- 2. Inconsistent messages, at inconsistent intervals create confusion about what is safe and what is not. Vocabulary should be clearly defined, and consistently used, in addition to safety messages developed with clear repeatable messages.
- 3. Development of statistical data has been inconsistent, confusing and incomplete, because there is no uniform reporting system.
- 4. The removal of lifeguards from beaches and pools to prevent lawsuits and encourage greater vigilance by parents/caregivers has not prevented drownings. Instead it has limited access to those who care to use the water but can't afford swimming/water safety lessons and rewarded the careless attitude of those who choose not to use facilities safely.

#### How to reduce drownings

1. Create more warning labels on packaging of "kiddie" and all above-ground pools, pool toys and pool supplies.

- 2. Create uniform reporting system for drowning deaths and submersion injuries.
  - Needs to be consistent from police to EMS to hospital to state DOH
  - Needs circumstances surrounding drowning reported
  - Needs specific information regarding supervision
  - Needs specific information on education
  - Needs local code requirements
  - Needs location of pool, and child immediately prior to incident
  - Needs identification of drain, pump, etc. equipment in use during incident
- 3. Encourage legislation.
  - Create recommendations for consistent barrier codes, laws, and regulations for new pools, spas
  - Create laws requiring existing pools to be brought up to code
  - Create laws requiring 5-year inspections of safety barriers
  - Create laws requiring anti-suction/anti-entrapment device installation
- 4. Encourage swimming and water safety education for children as part of their toddler and pre-school education.
- 5. Encourage swimming and water safety education for adults as part of the childbirth education program, and annual parent participation requirement in toddler and pre-school education programs.
- 6. Have permanently imprinted safety messages on filtration/pump system.
- 7. Encourage convenience in product development since it's the primary factor determining frequency of safety product use.

#### Suggested educational approaches

- Public information has been successfully disseminated through the media, McDonald's Restaurant tray liners, swim instructors, boating instructors, volunteers on open water and in schools, and through public and private school teachers.
- Children and parents/care givers should be the primary target, with all adults a secondary target
- Education should be multifaceted including hands on, requiring creation of art work, statistics, expert spokespersons, instructors, visual aids, books, flyers, transportation, swim suits, towels, educational aids including electronics, development of promotional products
- Allocate tax dollars at a federal, state, and local level; develop grant funding from civic groups.

Diane Sevey [dianesevey@hotmail.com] Wednesday, July 14, 2004 10:45 PM

Sent: To:

Subject:

Cc:

publicinformationofficer@scfaz.com; Council@cityofmesa.org; phil.gordon@phoenix.gov;

john\_mccain@mccain.senate.gov; mfwsc@hotmail.com

vcondit@hs.state.az.us; Tinsworth, Deborah K.; Hammond, Rocky; Stevenson, Todd A.

Good evening

Good evening to everyone. I wanted to address an issue that I do believe could aide in our fight for the change in the Pool Fencing Laws for Arizona. As I emailed before, I got a copy of the police report for my son's death. He drowned in our neighbor's unfenced pool on 3-29-04. In the report the neighbor admits to a police officer that he only locks his gates when his family goes out of town. My neighbor also is questioned why his pool was so unkept.

Earlier I had questioned legislatures on how we can say we cannot impede on property owner rights, but yet still hold them responsible when something, such as my son's death, happens. M.A.D.D. came about the same way. An irresponsbile drunk driver killed someone and now there are stricter laws and more campaigns to discourage drunk driving.

We need stricter laws in the State of Arizona. Had we lived in a newer neighborhood my neighbor would have been fined at the least. For not having his gate in proper working order. The point is not to prosecute people, but to let them know that they cannot be irresponsible. If they have a dangerous weapon, such as a pool on their property, they need to take the proper measures to ensure that all home occupants and neighborhood children are safe. We cannot continue to rely on the homeowner to make the needed decisions. Ecspecially when it comes to an epidemic such as this. I feel that they think the same way I used to, nothing will happen to them.

When you have a neighborhood full of children, you have got to do everything to protect them. All of us. With my neighbor admitting to the Police Officer that he never locks his gate, that is no different than the drunk driver getting behind a wheel and killing someone. The only difference is, the drunk driver gets manslaughter and I am told, we are so sorry for your loss but the newer homes have great pool fence laws!

We need all cities to maintain the same pool fence law. We need ALL neighborhoods to be involved. No grandfathering. If people know that if they do not keep up with the maintenance of their pool, if something happens they could be fined or put into jail, it just might encourage people to install a fence. Install locks.

I would be happy to send anyone a copy of the report. To see how senseless it all is. Had we lived in a newer neighborhood, his gate would have had to open out towards the street. Even if his gate was not locked, Derek would not have been able to push his way into the backyard. Derek and all of the other children out there are just as important as the person that is killed by a negligent, drunk driver. And they deserve a fight. For the children that are still here, they deserve the chance.

Warmest regards to everyone,

Diane Sevey www.derekslaw.com www.mfwsc.com- Harley's law

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# RECREATION SAFETY INSTITUTE

A Membership of Experts on Safety

P.O. BOX 392 -:- RONKONKOMA, NEW YORK 11779 -:- (516) 883-6399 - FAX (516) 883-1814

Ms. Rockelle Hammond Office of Secretary US Consumer Products Safety Commission Washington, DC 20207

To Whom It May Concern:

I wish to thank the Commission Members for calling the Public Field Hearing on Swimming Pool Safety. As an Aquatics Litigation Expert, Executive Director of the non profit RECREATION SAFETY INSTITUTE, Ltd. and its Aquatic Safety Services, Chair of the NATIONAL SAFETY COUNCILS Community Safety Division, and Chair of the NATIONAL AQUATIC COALITION Inc, these respective groups are supportive of your efforts to focus on the issues noted. We endorse the Commission's efforts and stand ready to assist in the implementation.

Unfortunately, a list minute Deposition Request has changed my plans for attending. I have enclosed several of close to 50 articles published on Pool Safety as well as service to WHO European Centre for Environment and Health project as attached.

Perhaps CPSC could expand beyond the hearing and form a Pool Safety Committee as it had ten to fifteen years ago. I and our organizations would be pleased to assist.

Thank you for your attention and consideration.

Very truly yours,

Dr. Arthur H. Mittelstaedt, Jr., Ed.D

**Executive Director** 

ВСЕМИРНАЯ ОРГАНИЗАЦИЯ ЗДРАВООХРАНЕНИЯ ЕВРОПЕИСКОЕ РЕГИОНАЛЬНОЕ БЮРО

#### EUROPEAN CENTRE FOR ENVIRONMENT AND HEALTH

WHO Expert Consultation on the Development
of Guidelines for Safe Recreational-water Environments:
Volumes 3: Health Risks from Swimming Pools,
Spas and other Similar Recreational-water
Environments; Volume 5: Monitoring and Assessment
of Swimming Pools, Spas and other Similar
Recreational-water Environments
Ann Arbor, Michigan, USA, 20 - 22 January 1997

ICP HCE 039 VD 96 I EHPM 07 01 04 18 December 1996

#### SCOPE AND PURPOSE

The water environment is used extensively for recreational purposes by both resident and tourist populations word-wide. Research has indicated that this has an impact upon health and WHO is often requested to provide guidance in this area

A number of health risks associated specifically with swimming pools, spas and similar recreational/ therapeutic water environments have been long-recognized and include for example those relating to physical hazards and accidents and those relating to water quality. Nevertheless new hazards continue to be recognized and include for example those associated with newly-recognized pathogens (e.g. *Cryptosporidium*), by-products of water treatment (especially disinfection by-products) and physical hazards associated with aspects of design, construction, operation and maintenance.

In response to the mounting evidence of significant health impact and the increasing attention this is receiving from the public, politicians and scientific community, the World Health Organization has initiated development of Guidelines for Safe Recreational-water Environments.

In June 1996 a group of 15 invited experts met in Bad Elster at the Research Department of the Institute for Water, Soil and Air Hygiene, WHO Collaborating Centre for Research on Drinking-water Hygiene, to discuss the development of the Guidelines. The meeting made a series of detailed recommendations regarding the structure and content of the Guidelines and needs for future research. The meeting specifically recommended that the Guidelines be prepared in five volumes including Volumes 3 and 5: Health Risks from Swimming Pools, Spas and other Similar Recreational-water Environments; and Monitoring and Assessment; and Monitoring and Assessment of Swimming Pools, Spas and other Similar Recreational-water Environments.

This meeting has been called with a number of inter-related objectives:

• to review the scope of the health impacts associated with recreational and therapeutic use of swimming pools, spas and similar water environments; and the proposed scope of the Guidelines:

Swimmer my

- on the basis of the above to assess the draft structure and content of the Guidelines and make detailed recommendations regarding the structure and content of the proposed Volumes 3 and 5 of the Guidelines;
- develop a programme of work for the preparation of these volumes which will ensure that full
  drafts are available for consideration by a review meeting in May 1997 and finalisation by
  October 1997; and
- to identify areas in which research is necessary in order that Guidelines may be developed based upon adequate scientific information and in order that standard setting, monitoring and enforcement in relation to design, construction and operation may be based upon sound scientific criteria.

Support for the development of WHO Guidelines for Safe Recreational-water Environments has been provided by the European Commission, the German Unweldbundesamt, the States of Jersey and the Government of Italy. Associated activities have also been supported by the United Nations Development Programme and ACEA.

ВСЕМИРНАЯ ОРГАНИЗАЦИЯ ЗДРАВООХРАНЕНИЯ ЕВРОПЕЙСКОЕ РЕГИОНАЛЬНОЕ БЮРО

#### EUROPEAN CENTRE FOR ENVIRONMENT AND HEALTH

# **FACT SHEET**

#### RECREATIONAL WATERS: RISKS AND BENEFITS

#### General

Many millions of people use water for recreation - it is estimated that there are:

- 100 million visitors to the Mediterranean each year, in addition to the 130 million inhabitants
- 40 million visitors to the Black Sea coast during summer months
- There are considerable positive health effects upon users of recreational water as well as negative ones.
- Research has tended to focus on adverse health effects of water contaminated with sewage.
- Spinal injuries, drowning and near drowning arising from accidents are severe health outcomes of great concern to public health.
- Human behaviour especially alcohol consumption is a prime factor that increases the likelihood of accidents.

#### **Drowning**

Available data suggests that males are more likely to drown that females (Global Health Statistics, 1990). In 1995 in the USA drowning rates for every age group were almost 4 times greater for males than for females (CDC, 1999).

Deaths through drowning - standardised rates (Health for All, 1993): (examples) Italy (1993) 0.09 per 10,000 persons UK (1993) 0.04 per 10,000 persons Latvia (1993) 1.47 per 10,000 persons France (1993) 0.11 per 10,000 persons

#### Where do drownings occur most often?

Private pools, lakes and other freshwater bodies contribute significantly to drowning statistics, especially in children - in Denmark for example 63% of all child drownings occurred in these types of water bodies between 1989 and 1993. In the same study it was reported that between one third and one half of all adult drownings were related to alcohol intake (Steenshero 1997).

Data from the UK (RoSPA, 1996): drowning by location - rivers and streams 32%, docks and harbours 3%, lakes and reservoirs 16%, swimming pools 2%, garden ponds, 2%, home baths 9%, coastal 28%, canals 7%, other 1%.

In the USA most drowning occur in swimming pools. The US Consumer Product Safety Commission report 500 drownings and 3000 near drowning in residential swimming pools among children under 5 years old. 60-90% of drownings among children aged 0-4 occur in residential pools and more than half occur in pools in their own home.

Drowning in the second leading cause of injury related death for children (1-19 years) accounting for 1,502 deaths in the USA in 1995. For children aged 0-4 it is the second leading cause of death.

#### Spinal injury

Compression factors of the spinal column have caused complete paralysis, through to quadriplegia and paraplegia. These injuries and sometimes fatalities result from diving, sliding or falling into water bodies.

It has been estimated in the USA that approximately 350 spinal cord injuries involving natural water bodies occur annually. Of the cases studied 90% result in quadriplegia. Diving into a wave at a beach and hitting the bottom was the most common cause.

# INCIDENCES OF QUADRIPLEGIA ASSOCIATED WITH DROWNING ACCIDENTS (GLOBAL HEALTH STATISTICS, 1990)

REGION	PREVALENCE RATE PER 100 000	INCIDENCE RATE PER 100,000
Latin America and the Caribbean	13.4	0.5
Middle Eastern Crescent	10.7	0.5
China	35.8	1.1
Other Asia and Islands	27.5	1.0
Sub Saharan Africa	28.3	1.5
India	19.7	0.8
Established market economies	3.9	0.1
Formerly Socialist economies of Europe	15.7	0.6
World	21.0	0.8

#### Water borne disease outbreaks associated with recreational water

Main disease concern is gastrointestinal illnesses that have been shown to be associated with indicator bacteria concentrations in the water. Also of concern are acute respiratory infections. Most research has not addressed severe health outcomes but transmission of infectious hepatitis and of poliomyelitis is biologically plausible.

It is difficult to estimate the number of people suffering gastrointestinal illnesses and other infections from swimming in recreational waters. Estimates vary but it has been suggested that microbiological contamination of bathing waters, primarily in the Mediterranean, is responsible for over two million cases of gastrointestinal diseases annually (EEA, 1995).

Saliba and Helmer (1990) concluded that between 25, 000 and 40,000 people are affected by gastrointestinal symptoms and micro-organism contamination per million population. Higher estimates are made by some tourist authorities that suggest that around 40% of tourists in the Mediterranean beach resorts become ill (although this may also include consumption of contaminated food or unsafe drinking water).

Between 1995 and 1996 37 outbreaks of waterborne diseases were recorded in 17 states in the USA attributed to recreational waters. An estimated 9,129 persons, including 8,449 persons were affected in two large outbreaks of cryptosporidiosis.

- 59.5% of these outbreaks were gastroenteritis
- 24.3% were outbreaks of dermatitis
- 16.2% were single cases of primary amoebic menoencephalitis
- Of the outbreaks of gastroenteritis 59.1% were associated with lake water, 36.4% with swimming or wading pools and 4.5% with a hot spring.
- Of the nine recorded outbreaks of dermatitis 77.8% were outbreaks of *Pseudonomas* dermatitis associated with hot tubs (CDC, 1999).
- There is some evidence to suggest a dose-response relationship between bacteria counts and symptoms however it is the type of pathogen in the water that determines the severity of the illness.

#### Control

Control relates primarily to treatment of sewage. Management of sewage discharges includes:

- Control of direct discharges onto the beach or equivalent
- Short or long sea outfalls processes of dispersion, dilution, sedimentation and inactivation following discharge should be considered.
- Holding sewage in storage and discharge during periods of no bather activity.

# Cyanobacteria

Allergic or irritative dermal reactions of varying severity are known from cyanobacteria (organisms with some characteristics of bacteria and some of algae). Symptoms may be more severe in users of diving suits where algal material is accumulated.

Documented evidence of significant health impairment shows that toxicity is expected in about 75% of all samples containing cyanobacteria. Symptoms include severe dermatitis, abdominal pain, nausea, vomiting sore throat, dry cough, headache, blistering of the mouth, dizziness, liver damage, tumour growth, and paralysis depending on the species of cyanobacteria.

Total numbers of persons affected have not been estimated but individual cases include:

- \_ 1989 10 soldiers affected in England after swimming and canoe training in water with heavy blooms of *Microcystis* spp. Two soldiers developed severe pneumonia.
- 1995 Australia epidemiological evidence of adverse health effects after recreational water contact. The study involving 852 participants showed increased incidence of diarrhoea, vomiting, flu symptoms, skin rashes, mouth ulcers, fevers, eye irritation within 2-7 days of exposure. (Pilotto et al., 1997) Symptoms increased with duration of water contact and density of cyanobacterial cells.

#### Pools without recirculation

Present special problems - have recently been found to be the source of waterborne enteric outbreaks. Causative agents involved in most of the outbreaks are *Shigella*, but also leptospira, Hepatitis A virus and rotavirus have been identified. Data on number of outbreaks is not widely available. Between 1975 and 1996, 46 epidemiologically confirmed outbreaks connected to bathing pools were recorded in Hungary with a total number of 6300 cases.

Today, the knowledge available relative to the construction and operations of pools has increased tremendously. Safety, sanitation, supervision, filtration, circulation, construction, and numerous other concerns must be addressed because of changes in codes, standards, criteria and guidelines.

Check your pool for signs of conditions and situations that can affect its liability and longevity, and correct the problems.

# Safety

Following are examples of solutions to problems that should be complied with.

Non-slip decks installed; water depths marked; water depths adequately complied with; obstructions marked; guard rails on high board; nets or screen around high board side and rail; equipment grounded; dangerous equipment removed (slides, lights); nosings of steps marked; breakpoint marked; lifeline placed; lifeguard position identified; lifesaving equipment (life rings, shepherd's crook, spine board) installed; first aid kit placed; ground fault breakers installed; pool electrical checked; non-slip handrails installed in ladder; unauthorized lighting removed; and GFI breakers on all poolside receptacles installed.

# Construction

Following are examples of problems.

- a. Pool shell: Cracks in walls; cracks in floor; spalling of concrete; settling of decks or pools; expansion joints opened; rust stains around fittings.
- b. Deck equipment: Rigid bolts not secure; rust apparent; treads not non-skid; diving boards not non-slip or protective sides and bottom; sharp edges in equipment; all electrical equipment not grounded per NEC.
- c. Gutter system: Overflow to waste or filter not labeled; leaks in gutter or piping; cracks in equipment; loose plates tripping hazard; open apparatus entrapment of limbs.
- d. Recirculation system: Filter does not clean water quickly (overnight); leaks in piping; corrosion in strainer; waste discharged to sanitary sewer; excessive maintenance; valve leaks; replacement parts not available; filter system undersized; hydraulic system undersized. e. Chlorine system: Corrosion evident; safety bars not on window or steel door; ventilation not from floor level; fan switch outside; ventilation discharge to inhabited area; yearly renovation performed; operation instructions not posted; gas mask not outside of room; leak test not satisfactory; eye wash and shower not available.
  - f. Bathhouse: Not adequate for programs; corrosion and deterioration around door frames; high humidity (indoor); settled decks; puddles on floor; inadequate parking; athletic qualities.

Modernization of the pool will be necessary to bring such pool up to date. The modernization must include the following in accumulative order of priority.

- 1. Change diving boards The size, length, height, type and performance of the boards must be checked with relation to the diving zone of the pool to insure safety.
- 2. Mark safety hazards (plus number) -- The edge of steps, break point of the bottom and other hazardous areas must be marked to create an awareness of contour changes.
- 3. Remove obstructions -- Steps, inlet pipes and other hazards must be removed to reduce injury.
- 4. Place warning signs -- The hazardous and dangerous conditions or situations must be identified and prohibited to prevent accidents.
- 5. Re-install mechanical equipment--The filters, pumps and inlets, and motors must be changed to accommodate new turnover rates and sanitary requirements.
- 6. Reconstruct shell inside of old pool -- the pool shape and contour should be changed by reconstructing a new pool shell within the old pool allowing for improved, skimmed systems and diving activities.

In most instances, the pool structure that is stable with a stable deck and level-skimming system can be updated easily with proper design and engineering. ••

Dr. Arthur H. Mittelstaedt Jr. is vice chairman of Ward Associates, P.C. landscape architects, architects and engineers in Bohemia, N.Y.



# Safety Deficiencies in Pools and Beaches Can Be Abated By Warnings By Dr. Arthur H. Mittelstaedt, Jr., Ed.D.

Though few government legislatively passed legal building codes require WARN-INGS for vulnerable buildings and site areas, technical standards for WARNINGS have been established and recognized for many years by the courts. The American National Standards Institute promulgated the first standard which has expanded to four, each for a specific area of industry. As a result, many different technical specifications literature and marketing materials recite or comply with such standards.

WARNINGS and failure to warn, an increasing theory of negligence is accepted in most legal systems. If the "failure to warn" doctrine or theory is relevant in a injury or fatality incident, settlements and judgements quickly result. Though it might seem that a proliferation of signs, labels, markings, sign-boards and rules are cluttering the pool environment, this clutter also seems to generate the thought that, "no-one will read the signs or markings anyway." However, warnings are an attempt to influence the behavior of the user or consumer. Such WARN-

ING signage usually include the alert, i.e., DANGER, WARNING, or CAUTION, the prohibition - NO SWIMMING, the hazard, i.e., ROCKS, STRONG CURRENT etc., the injury or fatality that could result, i.e., BROKEN NECK. DROWNING etc.

So if the public doesn't read the stuff anyway, why put it up? Well, the court decisions are changing this thought. The standard of practice is moving to the direction of implementing the courts decisions that are being reached- WARN, as well as IN-STRUCT, can reduce liability. The following types of warnings now exist for beaches and pools.

#### **SIGNS**

Sign manufactures are now producing signs for installation in water environments. One manufacturer is Quality Industries, who is producing a system of signs for aquatic facilities similar to the series available for playgrounds. A signage system of pictographs and messages in a standard box with a red circle and slash for permission. In addition to this standard symbol, which is also

available as a decal, is the complete sign. This sign would carry either of the three universal signs- Danger, Warning or Caution- in their appropriate graphic and color formation. The sign would also convey the message, black on white, of the conditions or reason for the prohibition of "no" such as shallow water, murky water, etc. The sign would also contain the message in english or other prominent language of the area such as "No Diving" and "No Jumping". The final element of the sign could be the consequence of improper action such as a fatal or serious neck injury or other result. It is incumbent upon every aquatic professional to provide the proper WARNINGS.

#### **LABELS**

Several manufacturers are now producing labels for everything from helmets to tricycles. Such labels describe the limits of use, prohibition of use, and proper use of the items among precautions that must be taken. Such labels are backed up by package instructions and precautions. In the pool and spa industry, labels are used on starting blocks, diving boards, slides, lifeguard stands and many other pieces of equipment as well as water devices. NO DIVING symbols in the form of decals for use on the coping around the pool are also available along with the depth.

#### **MARKINGS**

Several pool manufactures, designers or contractors are now integrating into the basic construction a variety of markings to enhance safety in attention to targets, racing lane center lines, and depth numerals (which should be in feet as well as meter). These markings include a line down the center of the pool and across the pool to depict the curvature of the pool bottom, at the edge of steps or seats to depict the edge, and where the pool bottom and slope breaks in its gradient.

#### **SIGNBOARDS**

All pool operators and beach managers, as well as designers and builders, must locate and incorporate posting of rules for the use of the facility that patrons must comply with relative to insuring their safety.

INSTRUCTIONS and failure to instructanother increasing theory of negligence accepted in the courts is the failure to instruct. To date, the operator, coach, lifeguard, instructor and others providing services to the public, must verbally and dramatically instruct as to what can be performed or not performed. The participant or spectator must be totally informed and aware of the risks and precautions to take to minimize the risks. Possible bilingual instructions may be necessary.

It is incumbent upon all responsible persons to attend to these common theories of negligence to prevent accidents, reduce exposure and avoid liabilities.

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# iving Injuries in Natural Waters: In Unsuspecting Danger

/ Dr. Arthur Mittelstaedt, Jr., Ed.D.

judgements may be made relative to some of the underlying causes of inies which happened in bodies of water loed in the natural environment. They inide both man-made and natural water ars. An examination of the problem from standpoint of the owners and operators water areas (lakes, ponds, quarries, cals, rivers, ocean and ocean embayments), users (patrons) of these areas, and the julatory agencies (federal, state, and lo) provides insight to some of the causve factors of diving injuries.

A study of diving injuries was conducted Dr. Milton Gabrielson, professor emeriof New York University and assistant to president of Nova University. He anaced the diving cases in natural waters ich were sorted out from over 400 cases I are included in this study. The 135 inents examined were derived through the press of recording actual litigation. It was a sample of a universal or statistical

study. The study was of cases made available to the investigators. The study identified and discussed the following factors related to each injury or fatality which the litigation focused:

- characteristics of the injured person
- facility where the accident occurred
- environmental factors
- events leading up to and immediately following the accident
- supervision and safety measures
- rescue procedures and first aid used

The study purports to identify who the victims are, were the accidents occurred, and the causative factors and circumstances surrounding the accidents.

The results of this study provided essen-

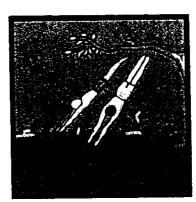
tial information to those responsible for managing or operating the types of facilities or areas where these accidents occurred. It also gives readers a greater understanding of the problem, and hopefully encour-

ages those responsible to take the actions necessary to reduce, if not eliminate, some of these catastrophic injuries.

The study and resultant report summarizes conclusions relative to the victim and its characteristics and the facility and its characteristics. The conclusions also addressed how the water areas and facilities are

managed and operated. The report, authored by Dr. Gabrielson and co-authored by myself, Shulman and Spivey identified the following:

Shallow water, turbid water conditions,





ack of information and warnings, diver misudgment, lack of lifeguards in designated areas, lack of risk analysis, failure to remove rees and branches, lack of public education, nisplaced structures and running from peaches – all of these factors should be reriewed by every owner, operator, and user of waterfront areas. Paramount concerns are he poor condition and depth of the water by the inexperienced diver, the non-warnng by owner and unsupervised shorelines.

The report focused on an array of defitiencies in the design, operation and use of iquatic facilities. These deficiencies in-:luded failure of owners and operators to survey the site and establish policies and proedures; failure of patrons to act safely, to obey signs an rules, become familiar with water, train, practice safe dives and use corect judgement about horseplay, substance thuse and other conditions; failure of comnercial builders and contractors to warn. ence hazards, recognize attraction of waer; failure of vacation homeowners to inorm any guest, post signs and prevent or prohibit improper use; failure of organizers of events to plan in advance, visit site beorehand, to assess risks and act with preaution and caution; and the failure to edurate the public to acquire aquatic knowledge ind skills, and practice safety.

The report projected recommendations hat can reduce many catastrophic injuries, temphasized the need for public education, rofessional waterfront standards, and technical boating and swimming dock standards.

The author and co-authors reflected the dea from victims for communication. It nakes a case for further elaboration of sevral critical points raised in the report. First, he role of the property owner, and second, hat the role of the property user must be xpanded on. Both parties have a responsibility in eliminating the unsuspecting daner in natural waters.

The property owner, be they a homewner, resort owner, or park owner, all have ccess to insurers. There are virtually no roperties that are bare of insurance in the ountry. Financial institutions, contractual bligations, and in some cases legal agreeients, require insurance to protect the inestments of money, equipment, materials, ersonnel, etc. Therefore, the property has responsibility to obtain a high level of nowledge about safety measures that can rotect themselves. The property owner nust be told by the insurers what the meaares are as related to the planned, designed. onstructed, supervised, or designated use f their property for aquatics. This is also

true as related to the non-planned, designed, constructed, supervised, but utilized and noted, thus designated, use of their property.

The responsibilities of both are, in essence, the same. In the latter, the mere nor > tice and acknowledgment of prior occurrence, and particularly a history of use without attempts to prohibit such use, makes it designated by occurrence and common knowledge that is a great "swimming hole". The key is the safety measure to prohibit and disallow use or occurrence that makes it become a non-designated swimming area. Signs, patrols, key barriers and fences are some of the deterrents to use. It is accepted that to initiate such efforts along all of the shorelines is an impossibility. However, when it is known that aquatic use takes place, that designates that the area must be addressed - whether it be a farm stream, a subdivision pond or a bay shore. Attention must be paid by insurers to assist their insurees to understand that water has unsuspecting hazards and dangers, and when designated by common or practiced use or by programmed use, follow all safety precautions.

In turn, the property owner has a responsibility to ask if not told. Anyone with the knowledge and financial resources to own property must be able to apply that same knowledge and resource to acquire the cor-

rect information on the use or misuse of their property and the consequences. There are many agencies that a landowner or homeowner can turn to so that they may find out how to disallow unwanted use of their natural waters, as well as how to allow wanted uses. Agencies from the United States Soil Conservation Service to the local library have such information. The excuse of "we didn't know" is impossible and impractical in this era of information technology.

In concert with this responsibility

is the growing codelegation of this responsibility to the intermediate, when such land or property changes hands. Today, the broker and the mortgagor are both responsible to the buyer for not informing them of toxic, as well as other hazards. The concept of requiring termite inspections has now advanced to many concerns. "Buyer beware" is not past. Real estate, banks, and other intermediaries are not shouldering the liability.

The property user, be they family member, a neighbor, or a paid or nonpaying invitee, all have access to national safety and national water safety associations, as well as similar state and local organizations, state and local educational institutions, and the media. They all must do more, but the user must also become aware. The special interest user, such as the swimmer, canoeist, hiker, boater, and bird watcher also must be aware of the publications and other information on water safety and swimming and diving hazards. They must not take the water for granted.

Natural water areas are different than man-made and have many dangers and hazards that are unsuspecting to all. The property owner must be diligent, but so must the property user.



# TOO MANY BROKEN NECKS FROM DIVING

By Dr. Arthur H. Middelstaedt Jr., Ed.

The number of people who have istained an injury to their spinal cord y diving into swimming pools and other odies of water is frightening. The U.S. onsumer Product Safety Commission itle (CPSC) has indicated that approxinately 700 spinal cord diving injuries re estimated to occur in the U.S. annuily as a result of recreational diving into esidential pools, public pools, and other odies of water. It has been further estinated that there are 150,000-175,000 eople presently living in the U.S. who ave suffered traumatic spinal cord iniry and that diving may account for 9-() percent of them.

A book entitled Diving Injuries: Re-2arch Findings and Recommendations or Reducing Catastrophic Injuries is bout to be published by CRC Press in oca Raton, Florida. This book repreents, without a doubt, the most comrehensive study of the causes of divig injuries that has ever been conucted. It contains a detailed analysis of 40 spinal cord injuries which occurred swimming pools and another 161 inrries which resulted from dives into our kes, rivers, ocean and other natural odies of water. The collection of data or the 601 injuries spanned a period of 5 years. Every accident site was vised and data recorded, compiled and emputerized. The cost of collecting the ata exceeded \$1.5 million. The book ot only identified where the injuries curred, but also detailed descriptions the victims and the circumstances asociated with each injury. The 440 poollated accidents were divided into the llowing categories:

- 211 injuries from dives into the shallow portion of in-ground swimming pools
- 92 injuries resulting from dives from springboard and jumpboards
- 105 injuries occurring in aboveground pools with a depth of 3-1/2 feet
- 32 injuries resulting from dives from starting blocks

**Table 1** indicates the ownership of the pools.

Table 1: Pool Ownership

Owner	Number
Residential	228
Hotel/Motel	72
Apartment/Condominiun	n 65
Municipality (City/Coun	
High School/College	24
Voluntary Agency	11
Commercial	7
Private Country Club	5
Others	3
TOTAL	440

The University of Alabama Spinal Cord Injury Care System published the book *Spinal Cord Injury: The Facts and Figures.* It states that more spinal cord injuries result from people diving into pools and other bodies of water (lakes, rivers, oceans) than all other sports combine, as shown in **Table 2**.

Table 2: Distribution of Sports-Related Accidents

A LICEAGONIO	
<b>Activity</b>	Percent
Diving	66.0
Football	6.1
Snow Skiing	3.8

Surfing	3.1
Trampoline	2.6
Other Winter Sports	2.3
Wrestling	2.3
Gymnastics	2.2
Horseback Riding	2.0
Other	9.8

Here are the facts relative to the 440 pool-related diving accident revealed in the book on diving injuries:

- 365 (82.8%) occurred in residential, hotel/motel, and apartment/con dominium pools as indicated in Table 1.
- Only two percent (2%) of the 365 pools had lifeguards on duty at the pool at the time of the accident.
- 92 (20.8%) were injured when diving from springboards or jumpboards, and all struck the upslope of the pool's bottom, the transition from the deepest point to the shallow portion of the pool.
- The water depth in the pools where 337 of the victims struck the bottom was 4 feet or less, with 292 striking the bottom in 3 ft. 6 in. of water or less.

(cont. on page 42...)



(...Broken Necks, cont. from page 33)

- Of the injuries resulting from dives off of starting blocks that were 30 inches above the water surface, all occurred in water depth of 4 feet or less, with most in 3 ft. 6 in.
- In 48.9 percent of the pools there were no rules posted anywhere around the pool which would identify proper use of the pool to pool patrons, which was most disturbing.
- Signs prohibiting diving from any place in the pool were present in only 43 of the 440 accident sites.
- The consumption of various alcoholic beverages involved 40.7% of the victims who, by their own admission, had a drink or two during the six-hour period prior to sustaining their injury, most claiming they had been drinking beer.
- Seven of the victims admitted to having used any drugs during a similar period.
- 74.32% of the victims were rescued and removed from the pool by friends who failed to use a spineboard in removing the victim from the water and only a few of the pools had a spineboard in the pool area.
- The predominant injury levels to the spine were at the C5, C5-6, and C6 vertebrae.
- 31.1% of the injuries occurred where the level of lighting of the pool was below the recommended standards.
- Only a few of the victims had ever received, at any time in their life, any instruction in diving from a qualified instructor.
- The mean age of the male victims was 23.8 and females 20.9.

  Interviews with the victims revealed
- the following:
  They never thought they could break their neck by diving where they did
  - No one told them verbally not to dive
  - They claimed that if they had seen a sign prohibiting diving they would not have made the dive
  - A surprising number indicated that their hands struck the bottom of the

pool first and slipped

• The accident occurred on most of the victims' first visit to the pool and on their first dive into the pool

Finally, it was a surprise to learn that many of the victims had only a bump on the head with only a slight abrasion or laceration. From this it was concluded that it does not take much force on the head to cause damage to the spine.

An analysis of the mechanics of diving contained in this book indicated that a person entering the water from a dive off the deck of a pool, at an angle of 45 degrees or more, will make contact with the bottom of the pool in water depths of 3 to 4 feet in three to four tenths of a second. To make a safe dive, the book states that the entry angle must not exceed 20 to 25 degrees with the arms and hands in front and head between the arms.

It was the conclusion of the authors of the book and the Editorial Board that the low level of public appreciation of the risks associated with diving into shallow water greatly increases the responsibility of every person and enterprise engaged in aquatics to practice and promote accident prevention and safety engineering. Until the public is educated, the awareness of the individual concern-

ing diving will remain at the same level as now exists. In this context, it is lamentable that the public will unwisely continue to conclude that the injured diver "was just fooling around."

Generally, an individual is not able to properly recognize hazards, the the evaluate risks, or appreciate the danger involved in diving. This conclusion should sound an ominous chord to all those within the swimming pool industry, sports and recreation personnel, owners of pools, and regulatory bodies. It is unconscionable for them to have the access and the means to know better and to do nothing.

The authors and Editorial Board believe in the principle that any death or serious injury is unreasonable and unacceptable when reasonable accident prevention means can be used to either prevent death or minimize injury. The test of reasonableness is merely to ascertain whether or not it is technologically and economically feasible to employ accident prevention techniques. Clearly, warning sign and supervision pass that test.

The authors associated with this book have used the tools of many professions to examine the data and causes of these paralyzing injuries produced by diving. They hope it will have an impact on those in positions of responsibility so that the number of these catastrophic injuries may be significantly reduced.

Anyone associated with the teaching of swimming and diving, and all those who design, build, own and operate pools, should read this book and be aware of the catastrophic results of diving. \*

Page 1 ot 1

### Stevenson, Todd A.

From: C

Cathy J. Flynt [cflynt@cox.net]

Sent:

Wednesday, July 21, 2004 5:47 AM

To:

Stevenson, Todd A.

Subject: pool hearing

My name is Cathleen Flynt I am a mother of four 3 boys 1 girl ages 13 to 3 homeowner with backyard pool(fenced) last sunday July 11 2004 an 18 month old girl drowned in a above ground backyard inflateable ring pool her name is Lexi Olive she was a close family friend and played often with my daughter they have no idea how she was able to get in the pool on her own the ladder was removed when unoccupied as stated to done on warning label how many other children have also found access to swimming pools like this one on the box you are given false security and a promise summer time fun and sun I will be attending the july 27 public field hearing hopefuly her parents will find the strength to also we all are responsable for the safety and wellness of every child everywhere. thank you Cathleen Flynt 623-594-9122 I would like to help make a difference Lexi was an incredible beautiful little girl who touched my life

# Hammond, Rocky

From: Ti

Tinsworth, Deborah K.

Sent:

Thursday, July 22, 2004 9:24 AM

To:

Hammond, Rocky

Subject: FW: Drowning prevention

Here it is

Deborah Kale Tinsworth
Children's Hazard Program Coordinator
Directorate for Epidemiology, Room 601A
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

phone: 301-504-7307 fax: 301-504-0081

email: dtinsworth@cpsc.gov

These comments are those of the CPSC staff. They have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

----Original Message----

From: Julie Spelman [mailto:waterwonders@swfla.rr.com]

**Sent:** Wednesday, July 21, 2004 7:54 AM

**To:** Hammond, Rocky **Cc:** Tinsworth, Deborah K. **Subject:** Drowning prevention

I am enclosing a letter to Mr. Hal Stratton regarding your request for information regarding drowning prevention. Although I was in attendance in Tampa, I felt it important to offer my written information and point of view. I have been teaching children and adults water safety and swimming skills for 25 + years and believe that I have some information to offer regarding dissemination of safety education. Thank you for your work in this most critical area.

Julie M. Spelman Innovative Aquatics, Inc. 239.770.0641 waterwonders@swfla.rr.com Julie McCaffrey-Spelman Innovative Aquatics; Inc. 1923 SE 10<sup>th</sup> Place Cape Coral, FL 33990

Hal Straton, Chairman U.S. Consumer Product Safety Commission Washington, DC 20207

July 20, 2004

Dear Mr. Straton,

I was honored to receive your invitation to contribute to the information being collected regarding drowning and entrapment. I was able to attend the public hearing in Tampa, although I did not testify. I was also in attendance during the closed door discussions after the hearings.

I feel compelled to offer my view in writing to you for the record even though I was able to give my perspective during the afternoon meeting with Debbie Tinsworth and the other attendees to that meeting.

Throughout both phases of the hearing, I formed an overall impression of the presentations. During the panel testimonies, there was some defensiveness, some anger, a certain amount of accusation and some attempts at presenting an individual solution as "The singular most effective solution" to be adopted by the committee.

From the aspect of public health and the issue of drowning, the underlying theme was obviously prevention but each presenter had a very different opinion regarding the weight of each component of that prevention. For example, some leaned heavily in favor of barriers, requiring them through legislation, enforcing their use, and making someone responsible if they are not used. Other speakers were strong advocates of parental supervision, etc.

The secondary theme was determining the future course of action, who was to implement what action and how and, finally, how to fund that action. The parents and families, naturally, wanted action NOW.

During the closed door discussion, I felt there was quite a lot of open and direct discussion which I think was very productive.

I believe that discussions of drowning prevention can be summarized into 5 basic topics: Barriers Supervision Accurate information collection Regulation Education

My input would be:

1. Define your terms.

I am an educator and as such I have listened over the years to people referring to "education" regarding drowning and each member of the discussion referring to something different. For example, some are referring to swimming lessons; some refer to pool safety education. I think education is under-represented in the drowning prevention discussion possibly due to the American Academy of Pediatrics press release stating that no child should be taught to swim until the age of 4 even though the policy statement clarifies that statement saying that swimming lessons with safety components such as those taught by the American Red Cross are valid. I have heard people (even pediatricians) state the erroneous idea that children do not learn enough and that they and their parents become overconfident with "swimming lessons". I believe that until the term "education" is defined clearly and understood equally, "education" will not get its due attention in the discussion of solutions.

Drowning Prevention Education must include teaching very young children (under 1 yr) and their caregivers how to modify their behavior in and around pools, and this training must continue regularly throughout their early years. This, in combination with increased swimming skills over time is the type of education which will help prevent drowning in young children.

2. CPSC can treat pools & spas as it has any other "dangerous" product in the past. We have known the answers, and the objections. We have in the last 2 generations seen huge strides in safety and the use of safety equipment. As examples seat belts, bike helmets, outlet covers, entrapment proof cribs, topple proof baby walkers, smoke detectors, car seats. The CPSC can inform consumers about what they are buying.

3. Early education not related to pool purchase.

The underlying theme from the parents was had they known the dangers, they would have done something. I propose tell them the dangers and the solutions at a time when they are willing even anxious to hear it. Foster/adoptive parents in Florida must take water safety classes before the process can be completed; why not teach birth parents as well. Every newborn child in the U.S. must leave the hospital by being placed in an approved car seat, properly installed, by hospital personnel. Drowning prevention information can be disseminated to parents to-be by pre-natal educators.

#### 4. PSA's

Penny Taylor Miller, a parent who lost her daughter to drowning, was extremely eloquent and passionate on the subject.

I would add to her suggestion. Produce PSA's which reach children and show them during times and programming when children and their caregivers are watching television. I would (and have) gone one step further to encourage the producers of children's programming to do segments on this #1 killer of our children.

5. Funding

The CPSC is responsible for warning the public about products, which if used according to safe guidelines are safe but can pose a potential threat otherwise. Making swimming pools safe will take the resources of the CPSC to educate consumers. The same way we have taught parents and caregivers how to cover outlets, lock toilet seats and buy cribs carefully, use only flame retardant PJ's, etc. the list of fabulous products with potential for harm is extensive and the CPSC has educated the public with its nationwide campaigns. The resources of The CPSC may not be unlimited, but are far more abundant than any of our local drowning prevention coalitions.

#### 6. Barriers

Although I obviously lean heavily toward education, I completely agree that the Australian model of requiring 4 sided barrier fencing with a self-closing, self-latching gate will effectively eliminate the threat of a child entering a pool unnoticed. The Florida law is a good start and its efficacy will give legislators ammunition to expand the regulation to include retrofitting.

Sincerely

Julie McCaffrey Spelman